

## 65° Dualband Directional Antenna

Kathrein's dual band antennas are ready for 3G applications, covering all existing wireless bands as well as all spectrum under consideration for future systems, AMPS, PCS and 3G/UMTS. These cross-polarized antennas offer diversity operation in the same space as a conventional 800 MHz antenna, and are mountable on our compact sector brackets.

- Wide band operation.
- Exceptional intermodulation characteristics.
- Remote control ready.
- Various gain, beamwidth and downtilt ranges.
- AISG compatible.
- High strength pultruded fiberglass radome.

## General specifications:

	peemeanemen		
Frequency range		824–960 MHz 1710–2180 MHz	
Impedance		50 ohms	
VSWR		<1.5:1	
Intermodulation (2x20w)		IM3:< -150 dBc	
Polarization		+45° and -45°	
Connecto	r	4 x 7-16 DIN female	
Isolation	intrasystem intersystem	>30 dB >50 dB (824–960 // 1710–2180 MHz) typ.	
Weight		48.5 lb (22 kg)	
Dimensions		75.4 x 10.3 x 5.5 inches (1916 x 262 x 139 mm)	
Equivalent flat plate area		6.16 ft² (0.572 m²)	
Wind survival rating*		120 mph (200 kph)	
Shipping dimensions		87.2 x 11.9 x 7.6 inches (2215 x 302 x 192 mm)	
Shipping weight		59.5 lb (27 kg)	
Mounting		Fixed mount options are available for 2 to 4.6 inch (50 to 115 mm) OD masts.	
See rever	se for order inforn	nation.	

824–90	60 MHz
270	270 00° 00° 00° 00° 00° 00° 00° 00° 00° 0
Horizontal pattern ±45°- polarization	Vertical pattern ±45°- polarization
140 - polarization	0.5°–9.5° electrical downtilt
1710–2	180 MHz
Horizontal pattern ±45°- polarization	Vertical pattern ±45°- polarization 0°-6° electrical downtilt

Specifications:	824-894 MHz	880-960 MHz	1710-1880 MHz	1850-1990 MHz	1920-2180 MHz
Gain	15.5 dBi	16 dBi	17.8 dBi	18.2 dBi	18.3 dBi
Front-to-back ratio	>27 dB (co-polar)	>25 dB (co-polar)	>25 dB (co-polar)	>25 dB (co-polar)	>25 dB (co-polar)
Maximum input power per input total power	500 watts (at 50°C) 1000 watts (at	500 watts (at 50°C) t 50°C)	250 watts (at 50°C)	250 watts (at 50°C) 500 watts (at 50°C)	250 watts (at 50°C)
+45° and -45° polarization horizontal beamwidth	68° (half-power)	65° (half-power)	67° (half-power)	65° (half-power)	63° (half-power)
+45° and -45° polarization vertical beamwidth	10.5° (half-power)	10° (half-power)	5.2° (half-power)	5° (half-power)	4.9° (half-power)
Electrical downtilt continuously adjustable	0.5°-9.5°	0.5°-9.5°	0°–6°	0°–6°	0°–6°
Sidelobe suppression for first sidelobe above horizon	0.5° 5° 9.5° T 15 15 15 dB	0.5° 5° 9.5° T 15 17 19 dB	0° 3° 6° T 14 15 15 dB	0° 3° 6° T 18 17 17 dB	0° 3° 6° T 17 17 16 dB
Cross polar ratio Main direction 0° Sector ±60°	20 dB (typical) >10 dB	20 dB (typical) >10 dB	16 dB (typical) >10 dB	18 dB (typical) >10 dB	18 dB (typical) >10 dB



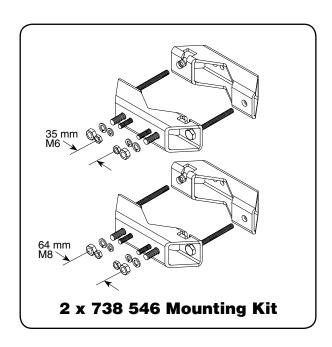


<sup>\*</sup> Mechanical design is based on environmental conditions as stipulated in EIA-222-F (June 1996) and/or ETS 300 019-1-4 which include the static mechanical load imposed on an antenna by wind at maximum velocity. See the Engineering Section of the catalog for further details.



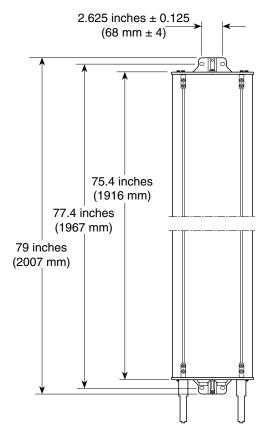
65° Dualband Directional Antenna

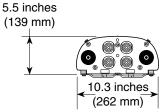




## **Mounting Options:**

Model	Description
2 x 738 546	Mounting Kit for 2 to 4.6 inch (50 to 115 mm) OD mast.
742 033	Three-panel Sector Mounting Kit (120 deg. ea.) for 4.5 inch (114.3 mm mm) OD steel mast.
742 034	Three-panel Sector Mounting Kit (120 deg. ea.) for 5.5 inch (139.7 mm mm) OD steel mast.
850 10013	Tilt Mount Kit 0–11 Degrees downtilt angle.





Profile PA2

	824-960	
RCU	-45° +45°	RCU
824-960	-45° +45°	1710–2180
	1710-2180	

## **Order Information:**

Model	Description
742 265	Antenna with 7-16 DIN connectors